



WILLIAMSONIA



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Summer Reading Bonanza

Well, it is already the beginning of August, and I hope many of you have been out in the field collecting in some interesting areas. Michigan has such a breadth of habitat types and so many habitats that it makes my head spin when I think of all the possibilities that exist for new locality records. Luckily, we keep getting new participants in various areas of the state, and the MOS juggernaut is starting to gather steam and press coverage. Ethan Bright and I have been working on new distribution maps, and they will be appearing in **separate mailing**. I had hoped to have the actual handbook done earlier, but a nasty bout of tendonitis restricted my work on manuscripts for a while. Ethan did a lot of work on the maps, importing data into ArcView and then exporting the maps. Of course, these are county-record maps, and in the future, when a "definitive" work on the Odonata of Michigan appears, we'd like to have a dot for each record. So far, we are at 22,000+ records and growing. That project may depend upon some external funding, as it would be an undertaking beyond my expertise. In any case, I think you'll agree the new maps are a great improvement over the old ones, and they reflect our records as of January 2000. I know I'll get a few comments, such as "Hey, I have records for X county that aren't there." Great – send them in!

So far, no new state records to announce, but many new county records keep coming in. Myles Willard of Mayville, MI (in the thumb area) has been sending me many fine color slides of dragonflies, and of course, he has to come up with a number of county records. Lora Loope in Munising also has a number of new county records for Alger Co., and I'll be able to summarize these things at the end of the season. Just because it's late summer, don't think that there are not any challenges left. Remember last issue's article on *Tramea*! Our neighbors to the South report a new state record, *Somatochlora walshii* Scudder (the brush-tipped emerald), for Ohio. It goes to show that when one thinks a survey is nearly complete, there are always more surprises to bring you back to reality. When it comes to Emeralds, one can expect a surprise now and then.

Please remember that with August, comes the chance to see a lot of Darners and we need specimens from bog areas in the UP, as well as the LP. Michigan has a lot of species of *Aeshna*, and last year, a number of people sent in *Aeshna clepsydra* as the darner *de jour*. Maybe this year we'll see *A. stichensis*, *A. juncea* or *A. subarctica* from northern sites. So, get out there and look!

Mark O'Brien

INTERESTING NEW PUBLICATIONS

One of the benefits of working at a museum with a good library is the opportunity to see a number of new books that one might not personally buy, but are nonetheless interesting and useful. The UMMZ Insect Division Library recently acquired two new titles that deserve mention here. Although I can't read Danish, "De danske guldsmede" which I presume means "The Dragonflies of Denmark" is a beautifully illustrated book by Ole Fogh Nielsen. This 280-page hard cover book has adults of each species and the larval habitats represented by excellent photographs. The uniform poses of the dragonflies are to be commended, as it would make field identification much easier. Distribution maps and what I presume to be ecological data are also included for the species. At the end of the book is a well-illustrated key to adults and larvae. Although Denmark has a depauperate fauna by our standards, the 53 species represented in the book seem to be well documented. As I said earlier, the color photographs in the book are excellent. I wish the book were in English, as I am sure it would be invaluable to anyone looking at species occurring in northern latitudes.

Nielsen, O.F. 1998. De Danske guldsmede. Danmarks Dyreliv Bind 8. Apollo Books, Stenstrup Denmark. 280 pp., hard cover. 6.8 x 9.8 in., ca. \$44.00. ISBN 87-88757-21-8.

The second book will be more readable by English-speaking odonatologists. Dan Powell's "A Guide to the Dragonflies of Great Britain" is a wonderfully illustrated book that would appeal to anyone interested in natural history. The author has illustrated the book with numerous watercolors. Each species has two pages devoted to it, with small illustrations of behavioral traits. With less than 40 resident species, Great Britain has fewer species than Washtenaw Co does. However, with a smaller fauna, one can devote more lavish attention to the intricate details of each species in a guide like this. This book is certainly aimed at the naturalist that does not know much about Odonata. The author makes liberal use of common names -- many of which would be unfamiliar to us, but he does include the Latin names on the heading for each species' account.

I really liked the companion illustrations for each species that show vignettes of behavior or identifying characteristics. Perhaps the charm of this book is that with such a limited fauna, the author can really provide an entertaining and yet very accurate and useful reference work for anyone in Great Britain.

Powell, Dan. 1999. A Guide to the Dragonflies of Great Britain. Arlequin Press, Chelmsford, Great Britain. 128 pp., durable soft cover, 6 x 8.25". £11.95. ISBN 1-900159-05-8.

North American Fauna

Much closer to home, is another new state-based guide. Kathy Biggs' "Common Dragonflies of California - A Beginner's Pocket Guide" is just that. It is a nice little pocket-sized guide with photographs of the common species in California. Most of the photographs are clear and show the species well enough to identify them, and key diagnostic features are listed along with flight periods and brief habitat descriptions. There are 39 dragonflies and 22 damselflies represented in this 96-page book. I certainly recommend this publication to anyone interested in Odonata, and at \$10.00, it's a bargain. If you visit or live on the West Coast, "Common Dragonflies of California" is certainly a handy book to carry in your pocket. For more information about ordering the book, you can surf over to <http://www.sonic.net/dragonfly> and also get companion information to that presented in Kathy's book.

Biggs, Kathy. 2000. Common Dragonflies of California. A Beginner's Pocket Guide. Azalea Creek Publishing, Sebastopol, CA. 96 pp, paperback, 4.5 x 5.75", 10.00. ISBN 0-9677934-0-8.

Mark O'Brien

A casual review of "Dragonfly Larvae (Odonata): A Guide to the identification of larvae of Australian families and identification and ecology of larvae from New South Wales," by John Hawking and Gunther Theischinger.

The authors have put together a fine, beautifully illustrated, informative and very user-friendly book that frankly is better than most user guides published here in North America. The larval photographs are excellent, and the diagnostic illustrations are clear and almost always opposite their respective couplets in the keys which makes using next to a microscope with forceps in both hands (i.e., avoiding cumbersome page-flipping) a real blessing. The larval descriptions are nicely detailed, the writing is succinct and clear, and the references up-to-date. The authors appear cognizant of the changes or proposed changes in higher odonate taxonomy; and acknowledge where these may not yet be universally accepted. In sum, the authors succeed in informing their audience, and also subtly expressing a labor of love.

The book begins with general information about larval morphology, with diagrams familiarizing the user, Australian regional information, and remarks on systematics. A more detailed description about the varied ecological zones of Australia, particularly regarding the differences in hydrologic regimes and its interaction with biogeography that result in particular distributions, would have been

useful and particularly informative to the non-Australian reader. A nicely illustrated family-level key is then provided, followed by a checklist of the Australian Odonata. The rest of the book consists of keys, diagnostic descriptions, ecological remarks and reference sources organized into chapters for each family. The binding is of spiral type, but the paper appears of thick quality resistant to the wear-and-tear that occurs with frequent use of metal spiral volumes.

I am not an expert on Australian odonatology, having been exposed almost exclusively to Nearctic odonates, so I cannot give the reader a thorough critique of the volume's accuracy and completeness. Still, it is nice to see some really different and bizarre morphology that one doesn't come across here in Michigan. In particular, the abdominal morphology of *Spinaeschna watsoni* and *Notoaeschna geminata* (Telephlebiidae = Aeshnidae) are really fascinating. Also interesting are the constricted caudal gills of Isostictidae. Of course, those more familiar with Neotropical species will see more similarities, but after seeing so many lateral spines of *Tramea* or *Pantala* species here in Michigan, the lateral spines of *Pentathemis membranulatai* Karsch provide wonderment! Conversely, one also might be fascinated by some interesting similarities in larval morphology, such as *Ictinogomphus australis* (Selys) and our own *Hagenius brevistylus* Selys, which share similar habits and appear almost identical except for the antennae and the prementum, and the similarities of some Australian Synthemistidae to our own species of Cordulegastridae, which have similar body shape and prementums. Of course, the master of wandering odonates, *Pantala flavascens*, is also there, which from the series of photographs I picked out in an instant!

Overall, this is a fine volume that appears to have few misprints and is nicely edited. The only failure I see is a lack of ecological information besides notes on habitat. For example, it would be nice to have some ecosystem map to which one could consult when one looks at the distribution maps. Other than this minor complaint, this is a wonderful and useful book. Considering the reasonable price (ca. Australian \$35, about US\$25), this would be a recommended book for the professional or serious amateur interested in having a reference for larval odonates from another biogeographic region; otherwise, only the better university libraries are likely to have this book available for inspection.

Published in 1999 by the Cooperative Research Centre for Freshwater Ecology, Identification Guide No. 24. NSW 2640, Australia (iv + 218).

Ethan Bright

OTHER NEW PUBLICATIONS

The Toronto Entomologists' Association announced that the first annual summary of Odonata observations in Ontario, Canada is now available for sale. This 8.5 x 11 inch publication with 153 pages includes 1999 Odonata observations and 16 articles on the Odonata of Ontario. The articles cover topics such as conservation status ranks, natural history, migration, lists and records, and an illustrated key to the mature nymphs and exuviae of eastern Canadian Stylurus. This initiative supports the objectives of

the Toronto Entomologists Association: to bring amateurs and professionals together, to educate the public and to produce information on the insects of Ontario.

To order your copy, please send a cheque/check to: Toronto Entomologists' Association, c/o Alan Hanks, 34 Seaton Drive, Aurora, Ontario Canada L4G 2K1. Cost is \$20 Can. incl. taxes & shipping for T.E.A. members; \$25 Can. incl. taxes & shipping for non-members in Canada; and \$20 U.S. or \$30 Can. incl. shipping for U.S. and overseas addresses. Membership in the T.E.A. is \$20 Can. per year and includes a subscription to the newsjournal Ontario Insects. Sorry but they can't take credit card orders."

MOS In the News

Carl Freeman has been busy this summer, as is evident from recent news clippings and a nice article in Traverse Magazine. Carl has been introducing the folks in NW Michigan to the joys of dragonflies via a series of local field trips. He caught the attention of the editor of Traverse, a glossy, monthly publication based in Traverse City. **Dragonfly Wonderworld** by Jeff Smith can be found on pp. 47-48 of the August, 2000 issue of Traverse. Jeff interviewed me by phone and includes a lot of information about the MOS in the article.

In addition, Carl's Audubon field trip was given a full front page and page 2 in the Wed. 7/27/2000 issue of Summer Scene, a tabloid from the Benzie Co. Record Patriot.

It's really great that Carl has been able to generate local interest in his activities. Not only does the MOS get some exposure, but many people are learning something about our favorite group of insects. I encourage anyone that has the potential to provide slide shows or lead field trips to contact their local nature centers and see if there is interest in such programs (generally, they'll say YES!). Also, if you are in a smaller community, local news coverage may also be more likely to join along.

I don't know if anyone has noticed, but at various Michigan State Parks, the DNR is providing natural history activities, indicated by a sign with a large dragonfly! I was going to photograph one, but forgot during my travels this summer.

Odonata Articles in Popular Press

- Lasswell, J. and F.T. Mitchell. 2000. Texas' Threadtail Damselflies. Texas Parks and Wildlife. June, pp. 76-77. (thanks Ron Gamble, for sending me a copy!)
- Ross, E.S. 2000. The selfish dragonfly. California Wild. Summer 2000, pp. 26-30 (nice photos).
- Smith, Jeff. 2000. Dragonfly Wonderworld. Traverse. August, pp. 47-48.
- Trial, L. 2000. Pond Dragons. Missouri Conservationist, Vol. 61, Issue 7, 4-9 (very nice photos.)

New Journal Articles

- Dunlap, M.S. and R. Hellenthal. 1999. A survey of the Odonata of the Western Upper Peninsula of Michigan. Abstract. North Amer. Benthological Soc. Meeting, Duluth, MN.

- Mitchell, F.T. and J.L. Lasswell. 2000. Digital Dragonflies. American Entomologist 46(2):110-115.
- Ross, S. and M.F. O'Brien. 2000. *Williamsonia lintneri* (Odonata: Corduliidae) – a first Michigan record with additional notes on *W. fletcheri*. Great Lakes Entomol. 32(3):201-205.
- Steffins, W.P. and W.A. Smith. 2000. New distribution records for Minnesota Odonata. Great Lakes Entomol. 32(3):219-223.

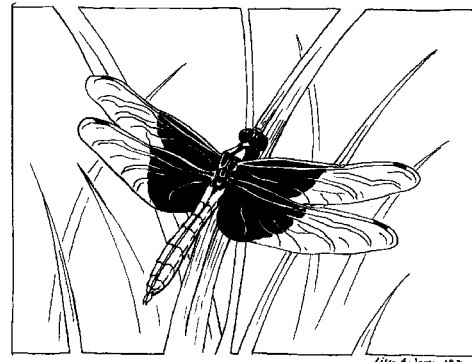
Field Trip Report

The last two years I have been leading dragonfly field trips in the Traverse City area. All have been well attended. I have had 5 field trips and one slide show (field trip rained out), which a total of about 100 people have attended. I have been very lucky on the weather for all the trips except one. The first one I did last year resulted in, at the time, the first state record for *Tramea onusta*. Probably a never to be repeated experience that goes under the category of How Lucky Can You Get.

All the people have been very interested and fascinated about dragons, most not knowing the difference between a damselfly & dragonfly. I hope some will continue their interest and contribute to MOS, but at least they have a greater understanding and appreciation of Odonata. This article is to encourage all of you to schedule some field trips (live "right" so you will have good weather) and get the word out.

Some highlights for the participants have been catching *Hagenius brevistylis*, the dragon hunter, which three participants did all kids. They and the other participants were impressed when viewing them up close. Speaking of kids, one group I took out was made up of high school aged kids going to summer school and their term for mating dragons was "airborne porn". A little more colorful than "in wheel". A partial list of species seen this summer on my field trips includes; *Anax junis*, *Dromogomphus spinosus*, *Leucorrhinia intacta*, *Leucorrhinia glacialis*, *Ladona julia*, *Libellula quadrimaculata*, *L. luctuosa*, *L. pulchella*, *Plathemis lydia*, *Celithemis elisa*, *Tramea lacerata*, *Sympetrum obtrusum*, *Calopteryx maculata*, *Enallagma sp.*, and *Ischnura verticalis*.

Carl Freeman





Hines' Sight

This July 12-14, I attended the Hines' Emerald Dragonfly (HED) Workshop in Door County, Wisconsin. The workshop, sponsored by the U.S. Fish and Wildlife Service, The Nature Conservancy, Wisconsin Dept. of Natural Resources and The Ridges Sanctuary, was presented for those people that are working in possible Hines' Emerald (*Somatochlora hineana* Williamson) habitat. At present, *S. hineana* is known from Wisconsin, Illinois, Michigan, Missouri, Ohio, Indiana, and possibly Alabama, and some other states. The HED workshop was held in the area with the largest known populations of *S. hineana*. We were not disappointed -- with beautiful weather and the scenic Door County area, we soon saw more *S. hineana* than most of us have seen of any one *Somatochlora* species in the field.

I drove to the workshop from Marquette, after having spent 4 days in the Huron Mountains (that's another story). On the way there, I stopped in Cedar River in Menominee Co, and visited with Teresa Friedrich, a UMMZ graduate student working on mice and incidence of Lyme disease pathogens. Teresa showed me the beautiful Cedar River, and that is definitely a place where one could find some interesting Odonata -- especially gomphids. I saw several, and managed to snag a *Macromia illinoensis* for my troubles. I also think I saw a *Gomphus vastus*.

I finally arrived at the Wagon Trail Resort, where most of the workshop attendees were staying. I know many of them as fellow Odonatologists, and it almost seemed like a regional DSA meeting. However, there were also some people in the group that are botanists, land conservancy specialists, etc. One of the goals of the workshop is to bring as many people in as possible that might be in *S. hineana* habitat, so the audience was varied. The first evening was spent interacting with fellow Odonata people as attendees trickled into the resort. My roommate, Nick Donnelly is from

Binghamton, NY, and is certainly what I consider to be one of the top experts on the Odonata. With so many fellow Odonatists there, it felt like a small Dragonfly Soc. America meeting.

Day 1. We drove to Ephraim Village Hall after a starch and lard-filled breakfast at the Wagon Trail Resort. A good thing though, as it fortified us for the morning's talks which by virtue of the varied audience, had to cover a lot of Odonata information many of us already knew. However, Tim Cashatt and Tim Vogt did a good job of introducing the non-Odonata people to our subject. We also learned some basic information on *S. hineana* and its habitat and biology.

Off to lunch -- Nick and I found a sandwich shoppe (very touristy up there!) and grabbed a bite as we headed off to the Ridges Sanctuary in Bailey's Harbor.

There, all of us assembled in a small open area adjacent to the Ridges Sanctuary gift shop. Within 5 minutes, a female *S. hineana* had cruised around several of us, and somebody finally carefully netted it so that we could photograph her. A minute or so later, a male appeared, and we did the same. About that time, Dan Soluk and his students arrived and carefully explained why we were not to net specimens unless we were under supervision. Most of the time, when we catch dragonflies, we hold them by the wings, and the wings get held together over the top of the thorax. Unfortunately, that seems to weaken their flight muscles for an indeterminate period, and such things make them more susceptible to predation. Dan and his students are studying mark-recapture rates, and glue a small numbered honeybee tag to the front of the thorax, while holding them carefully so that the wings are in their typical position. With all of us there, they had a golden opportunity to capture and mark as many *S. hineana* as possible in an afternoon. We split up into three groups and staked out some areas. During this time, we kept seeing *S. hineana* flying in the area where we were standing, and I am sure some of the inveterate collectors were just ITCHING TO CATCH ONE...

At some point, I think everyone got to see *S. hineana* close up, as well as *S. williamsoni*, *S. walshii* and *S. minor*. After the afternoon's action concluded, we found that in the span of about 4 hours, we captured and marked 46 *S. hineana* - 19 males and 27 females. When I think about all of the collecting I have done, I don't think I have collected that many *Somatochloras* of all species TOTAL. Certainly I have not seen 46 specimens of any *Somatochlora* species in one afternoon. So, it would be easy to say, "Endangered, not!" if it were not for the fact that the Ridges IS a unique place, and *S. hineana* seems to thrive there, at least. The series of old sandy beach ridges interspersed with swales give the Ridges Sanctuary its name.

Day 2. Today we were treated to some real interesting aspects of *S. hineana* ecology. Dan Soluk of The University of Illinois provided us with some fascinating information on *S. hineana* biology/ecology.

S. hineana requires fen habitats over dolomitic limestone, and these usually have slowly moving water (seeps or springs), areas of sedges, cattails and calciphilic plants. Occasional periods of drying and the presence of a burrowing crayfish, *Cambarus diogenes*, also typify the habitats. *S. hineana* larvae utilize the crayfish burrows as not only daytime refugia, but during periods of drought, these burrows are deep enough to keep larvae in water. Apparently the crayfish do not take notice of the larvae within the confines of the burrows.



A bunch of us along the roadway watching a HED.

Dan and his students have also conducted road-kill surveys as well as larval surveys and mark/recapture of adults. He has also installed remote infrared cameras to record the larval activity at night. It was amazing to see how much they have learned about this species, and I have to wonder how little we know about other emeralds.

After lunch, I stopped back at the Ridges Sanctuary and bought a sweatshirt and one of the dragonfly videotapes. Both were definite good buys. Nick and I then met the rest of the group at Mud Lake recreation Area, where Dan and his students have set up many of their experiments. Again, we were greeted by a bevy of *S. hineanas* flying up and down the roadway. Dan showed us all how he uses a bilge pump to pump out the crayfish burrows to remove the *S. hineana* larvae, which are counted and then returned unharmed. Dan's USFWS permit does allow some incidental take of specimens during the course of their studies, but they are careful as possible to prevent damage to living specimens.

During the course of the afternoon I was rewarded by a male *S. hineana* landing on a branch only a couple of feet away and I was able to get two photos. I didn't have my preferred lens on, but the photos came out quite acceptable.

Day 3. The morning's talks all dealt with the Hine's Emerald Recovery Plan. It was an interesting session, and Cathy Carnes and Dan Soluk led the discussion. Basically, if enough sub populations and populations are found to be present and healthy, then the objective is to reduce the classification to Threatened Status. However, this is a long-term project, and over the course of the next 10 years, it is very possible that HED status will change -- either for better or worse, depending upon how its habitats are affected.

After lunch, we split up, and a few of us went out to some other sites to see what we could find. Intermittent rain and clouds were present, but Nick Donnelly, Steve Hummel and I saw at least 5 more *S. hineana* off North Bay road.

Finally, I headed south to Manitowoc so I could take the car ferry across Lake Michigan to Ludington. It was the midnight run, so I got into Ludington around 5:30 am. Then it was home to Ann Arbor -- finally. I recommend the car ferry if you want to get to Door Co. WI without wanting to go through Chicago or via the UP. I also recommend a trip to the Ridges Sanctuary in Bailey's Harbor if you want to see Hine's Emerald in numbers and in an easily accessed area. A camera with a macro lens and a pair of close-focusing binoculars are all the equipment that you'll need, as I believe

they'd get a little uneasy with an unknown somebody carrying an insect net at the Ridges.

I thank Cathy Carnes, Tim Vogt and Tim Cashatt, Dan Soluk, Paul Burton, and their respective organizations for putting on a valuable and informative workshop. Nature also gets a thank you for providing us with great weather and a wonderful experience!

During the course of the workshop, I had some lengthy conversations about the possibility of the MOS hosting either a regional DSA (Dragonfly Society of the Americas) meeting or a national one. I am sure that our case for a meeting will be given at the DSA meeting being held in British Columbia this summer. Possibilities expressed were the Marquette area, due to the interesting landforms not far from there and the fact that it does have an airport. Another possibility would be holding a meeting in Sault Ste. Marie and then going out to field trips from there. In any case, a UP site would be very interesting for a lot of reasons. What do you think? Could we do it?

Mark O'Brien

News From South of Ann Arbor

I'd be surprised if you weren't already aware of it, but just want to make sure you know about the mitigation pond (for the Envotech operations) just east of the Norfolk-Southern RR tracks on the south side of Arkona Road a long mile east of US-23 near Milan. I was there with John Swales, Roger Kuhlman, and Roger Wykes this past Sunday (July 9) during our butterfly count of the Mooreville circle and the ODONATES outnumbered the butterflies 3 or 4 to one! I'm still extremely poor at field identification, and my focus wasn't on them, but I couldn't help noticing both the variety and the numbers of dragonflies, especially. Three years ago I collected there on September 20 and had many. Also wonder if you've ever checked out the dead end area of Merritt Road on the west side of US-23. It, too, seems to be a good ODONATE spot, and I'm guessing that the wetland behind (south and west of) the woods on the south side of the road would be even better, although I've only been near it once when I was checking for Wood Thrushes during a visit for Cornell's Birds in Forested Landscapes project. The land owner there is a fellow named Dale Remski (lives on the east side of the expressway), and he's granted me permission to study his woods and would probably be agreeable to you checking out the swampy area I mention.

One more note. While my nephew, Dan Farmer - also in your database of MOS participants were at his parents' 50th Anniversary open house on June 25, 2000, we noted two *Tramea lacerata* flying above the guests. Dan had his net along and caught one, which he preserved. That was on the south side of Korn Street in section 17 of Cass Co. Judging from the range map for the species in Legler and Westover's Common Dragonflies of Wisconsin, I'm guessing that it's probably not at all uncommon in SW MI, but since I don't see it in your on-line range map for MOS in that area, thought it might be worth mentioning. I believe Dan still has the specimen. I was impressed with the effectiveness of his technique for bringing it within range to net. Prior to his hand-waving come-on, it had been flying consistently at around 20 feet above the ground. Within a minute or two, he had drawn it in for a capture on his first sweep of the net!

John Farmer

Kent Co. Dragonflies

I am presently conducting a survey and compiling a checklist of Odonata at the Howard Christensen Nature Center in Kent Co., MI. I am focusing primarily on Anisoptera at this time, but intend to continue on with Zygoptera in the future as my identification skills increase. I began my survey/checklist this spring (2000). I am also vouchering specimens of all species for possible identification verification in the future.

Here is my Anisoptera list as of 30 June, 2000 (all recorded from T10N, R12W, S13):

<i>Cordulegaster maculata</i>	23 June, 2000
<i>Anax junius</i>	30 June 2000
<i>Gomphus spicatus</i>	17 May 2000
<i>Hagenius brevistylus</i>	23 June, 2000
<i>Dorocordulia libera</i>	19 June, 2000
<i>Epitheca canis</i>	17 May 2000
<i>Ladona julia</i>	17 May, 2000
<i>Celithemis elisa</i>	31 May, 2000
<i>Tramea lacerata</i>	23 June, 2000
<i>Libellula luctuosa</i>	23 June, 2000
<i>Plathemis lydia</i>	23 June, 2000
<i>Libellula pulchella</i>	23 June, 2000
<i>Pachydiplax longipennis</i>	1 Sept., 1996
<i>Leucorrhinia frigida</i>	30 June, 2000
<i>Leucorrhinia intacta</i>	31 May, 2000
<i>Sympetrum obtrusum</i>	13 Sept., 1999
<i>Sympetrum vicinum</i>	13 Sept., 1999

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Port Huron SGA Trip

(Allen Chartier, one of our well-known resident birders and bird photographer, has been finding some interesting species in his travels in SE lower Michigan. He recently acquired a folding insect net, and I am pleased to say that he now has several new county records to his credit. ...MFO)

The odonata species recorded below were observed/(collected) at Port Huron State Game Area, St. Clair Co., MI, (T7N, R16E, S 16 & 17) on June 17, 2000. Starred entries are new records for St. Clair Co.

Calopteryx maculata - 20
**Lestes dryas* - 10 (1)
Anax junius - 1
**Epitheca princeps* - 30
**Epitheca cynosura* - 10
**Cordulegaster obliqua* - 10 (1)
Gomphus fraternus - 15 (1)
**Erythemis simplicicollis* - 4 f
Libellula luctuosa - 20
**Plathemis lydia* - 15 (1)
Libellula pulchella - 5
Celithemis elisa - 5 (1)
Sympetrum spp. - 20

Allen Chartier

Williamsonia lintneri Trip in Mecosta Co.



A lintneri in the hand is worth how many in the brush?

On April 29, 2000, my daughter Marjorie and I travelled with Stephen Ross to the site in Mecosta Co., Michigan where he found *Williamsonia lintneri* and *fletcheri* last spring [see Ross, S. and M.F. O'Brien. 2000. *Williamsonia lintneri* (Odonata: Corduliidae) – a first Michigan record with additional notes on *W. fletcheri*. Great Lakes Entomol. 32(3):201-205.] We had set this date up the previous October, figuring that *lintneri* may be out at the end of April. As one might not expect, we had a marvelously sunny day, light breeze, and a perfect day (though it started out chilly) for being out in the field. Steve led us to a number of his collecting sites, where he had been assiduously adding to the county record list for Mecosta Co.

Steve finally led us to the *Williamsonia* site -- a large tract of State-owned land in Sheridan Township. A very beat-up two-track led us into the area, and we parked at a small opening. The woods there were mostly deciduous, and the leaves were just beginning to think about bursting from their buds. The cherries were in bloom, though, and were attracting small bees to the blossoms. We followed the two-track for no more than 30 meters, when we saw a small dragonfly flit away! I wondered aloud if it might have been *W. lintneri*, and a few minutes later, Marjorie caught a teneral female *lintneri* in her net. The little corduliid had been basking in the sunlit two-track, and we were quite excited to find one. I then remarked that Marjorie and I were only the second and third people in Michigan to have seen *lintneri*, whereupon Marjorie corrected me that she was the second person to have **netted** one. After we took photographs, we gently let the teneral female go. That was the only one we saw that day, but nevertheless, it confirmed our suspicion that *W. lintneri* is out in late April in Michigan. I doubt that it's out much earlier than the 29th of April unless we have a year with an early warm spring. It appears that leafing out and shading the forest floor signals the end of the *W. lintneri* season, so that means the time to search for this species is a very small window. Any future survey work in Michigan will have to start in late April in the south, with early to mid-May in the UP as the target period.

The large bog that adjoins the wooded area that we were in likely contains the larval habitat for both species of *Williamsonia*. *Sphagnum* with *Vaccinium* and other ericaceous shrubs dominate the bog, and there were many small pools and depressions.

We found only one other odonate that day. Marjorie caught a *Epitheca canis* male - a bit teneral, but it was a keeper, given the early date. The other interesting insects we saw were brown elfins, mourning cloaks and spring azure butterflies.

It was a good day for all three of us. It was rewarding to see the species that we were looking for, and I hope that others will start looking in woodlands bordering bogs in late April next year. Marjorie and I visited Cedar lake Bog in western Washtenaw Co. on April 15, and did not see any *W. lintneri* then, but that doesn't rule out the site for future searches. It would be nice to see additional records of *Williamsonia lintneri* from other parts of the state, so I encourage you to get out and look!

Mark O'Brien



Celithemis eponina by Marjorie O'Brien

Table of *Sympetrum* (Meadowhawk) Male Characteristics by Stephen Ross

Species	Face	Abdomen	Habitat	Legs	Wings
<i>Sympetrum corruptum</i> Variegated Meadowhawk	Pinkish	**gray, top and segments outlined in red	Slow streams, arid sandy-gravelly areas	Black	**Pink veins along leading edge
<i>Sympetrum costiferum</i> Saffron-winged Meadowhawk	Yellowish-red	Red	Reedy marsh, sandy-gravelly ponds and stream edges	**Longitudinal yellow stripe on black legs when young, red when older	**Front veins golden when young, gone in older individs.
<i>Sympetrum obtrusum</i> White-faced Meadowhawk	**White	**Red with distinct black saw-tooth pattern	Ponds, marshes, fields, wide spread	Black	Clear
<i>Sympetrum internum</i> Cherry-faced Meadowhawk	**Red (cherry)	**Red with distinct black saw-tooth pattern	Marshes, ponds and streams	Black	Clear
<i>Sympetrum rubicundulum</i> Ruby Meadowhawk	Yellow-brown	Red with less distinct saw-tooth pattern	Ponds, ditches and slow streams	Black	Clear
<i>Sympetrum semicinctum</i> Band-winged Meadowhawk	Red	Red, slight dark mark on lower abdom. segments	Spring fed marshes and ponds	Black	**Cloudy with distinct orange-brown patch on hind wing
<i>Sympetrum vicinum</i> Yellow-legged Meadowhawk	Light red (rosy)	**Red, no saw-tooth marks, tip dusky black	Everywhere	**Yellow, darker as they age toward gray	Clear, golden near bases

Based on Legler, 1998. Color Guide to Common Dragonflies of Wisconsin.

** indicates a key feature.

Tenerals and females are generally have the same body pattern as the males but are yellow to grayish green. Some females may also be red.